In this clearly written and well argued book, Mark Johnson presents a theory of embodied cognition and discusses the implications it has for theories of meaning, language and aesthetics. His pragmatist foundations are on show when he writes that ‘The so-called norms of logical inference are just the patterns of thinking that we have discovered as having served us well in our prior inquiries, relative to certain values, purposes, and types of situations’ (p.109). Johnson’s particular contribution to theories of meaning and language is that he grounds ‘inference’ even at the most abstract level in patterns of sensorimotor experience (p.279). He rejects traditional analytic theories of language on the basis that their central concept of reference is grounded in an erroneous and unfounded distinction between transcendent universals and bodily particulars (p.89-91).

The book is divided into three Parts. In the first Part, Johnson draws upon John Dewey and William James to provide a naturalised account of cognition. He gives their views a contemporary relevance by updating them according to contemporary theories from cognitive science such as Don Tucker’s work on cognition. Tucker found that the primitive core of the brain has massively interconnected structures whereas the outer and more recently evolved shell is more sparsely interconnected. On this basis, Johnson reasons that there would be more functional differentiation and more modularity of brain areas in the cortical shell than in the limbic core.
Consequently, in the limbic core the same processes are redeployed in various
cognitive and perceptual tasks (p.99). The primitives of perceptual experience are not
atomistic elements of perceptual data that we then proceed to construct into
representations, Johnson argues, but rather whole affordances or flows of perceptual
experience that we proceed to analyse and within which we make distinctions as we
move from coarse to fine grained levels of meaning. This is seen to vindicate Dewey
and James’ idea that ‘concepts arise from a global grasp of a situation’ (p.99) where
our initial feeling response determines which aspects of experience we attend to.
Furthermore Johnson goes on to use such evidence to support his argument that all
inferential processes and capacities for abstract thinking appropriate the workings of
the sensorimotor system rather than exercise purported modules for syntax or form-
generating modules.

In Part II, we are taken into the heart of the enterprise where it is argued that the
primitives of meaning or cognition are not representations but schemata based in
sensorimotor experiences. While some concrete, spatial and action concepts like “in”,
“on” and “in front of” gain their meaning directly from sensorimotor experiences,
more abstract concepts are fundamentally metaphoric, that is, grounded in our
sensorimotor neural circuitry via metaphorical mapping structures. At this point
Johnson begins to make explicit the implications of his theory of embodied cognition
for analytic philosophy. He dislodges the non-semantic metaphor theories of John
Searle and Donald Davidson and he rejects the deeply ingrained dualism underlying
their propositional, truth-conditional theories of language more generally. Johnson
rejects the theories of Searle and Davidson according to which language consists of
symbols that refer to or correspond with states of affairs in the world. In contrast,
according to Johnson, the empirical evidence shows that cognition is ‘not some inner process performed by “mind” but rather it is a form of embodied action.’ (p.147). Concepts are not re-presentations but rather structures of experience (p.146).

While I found Johnson’s general theory coherent and compelling, one qualm I had was that at certain points in the argument undue weight was given to the evidence provided by neurology and empirical theories of mind. While Johnson says that giving metaphor a crucial role in cognition is controversial and needs further empirical verification, he also claims that the empirical evidence to date is compatible with his theory, but incompatible with Searle’s and Davidson’s theories of meaning. I think Johnson is on thin ice here. To claim that the evidence from cognitive neuroscience supports one philosophical theory of language or meaning over another is to beg the question somewhat given the interpretation that needs to take place before neurological activity can be said to mean anything at all. However, making sense of such data does put a constraint on philosophical theory and in his theory-building Johnson observes these constraints. It is when he stops treating the empirical data as direct evidence for any particular theory and puts it in the service of our envisaging a way of replacing the mind—body dualism with an integrated mind-body that I think he gets the relevance of the empirical data right. Johnson is able to demonstrate how sensorimotor activity might indirectly provide the formal parameters of our thoughts and how it is that meaning might be ‘a matter of relations and connections grounded in bodily organism-environment coupling, or interaction’ (p.265). Johnson provides us with an alternative to what he sees as the erroneous assumptions that underlie classical (Anglo-American analytic) philosophy of language whose chief mistake, he says, is to treat as the basis for meaning in general the
assumption that words refer and sentences mean in virtue of objective truth conditions (p.271).

The third part of the book follows the implications of embodied cognition into the area of value enquiry, specifically aesthetics. One idea to be taken from this part of the book is that meaning-making is the ostensible purpose of a life and a life well lived is more like beautiful art than a scientific experiment as traditionally understood. Under traditional categories we are prepared to admit that value and meaning are unified in art. Johnson’s point though is that art shows us the origin and nature of the relation between value and meaning. Johnson argues that we should ground philosophy in aesthetics: ‘basing philosophy on an account of the origin and growth of embodied meaning and value.’ (p.213)

Johnson begins his account of the aesthetic by blaming dualism and the associated dichotomies for the diminished status afforded the aesthetic by analytic philosophers. He treats Immanuel Kant’s aesthetic theory as a major culprit but his interpretation of Kant owes much to early twentieth century interpretations of formalism. As such Johnson puts the wrong emphasis on the notion of ‘disinterest’. ‘Disinterest’ in Kant’s aesthetic theory is meant to emphasize that pleasure in beauty is a pleasure felt in our freedom from the determination of nature. Johnson, however, sees the concept of ‘disinterestedness’ as the source of the disassociation of the aesthetic merit of art from ‘conceptualization, meaning, reasoning, and knowledge’ (p.217). Yet, in Kantian aesthetics, the mental harmony that constitutes an experience of beauty is only possible when the imagination is engaged with cognition. Imagination on its own is simply personal reverie or daydreaming. The cognitive content of the experience of
mental harmony between imagination and cognition for Kant is ultimately sourced in
the ideas of reason (infinity, immortality and freedom); ideas which for Kant were \textit{a priori}. Hence, for Kant, art did not provide empirical knowledge but it did contribute
to the construction of a positive orientation towards the natural world and community.
In this respect, and contrary to what Johnson implies, Kant is not the enemy where
embodied aesthetics is concerned.

Johnson discusses the meaning of visual art and music in terms of an embodied
language of formal properties, quoting approvingly from Susanne Langer. Surely one
of the implications of Kant’s aesthetic theory is just what Johnson says of Langer’s
view: that the forms of art are meaningful in virtue of some process other than
reference. For Johnson, all concepts have an ultimate source in bodily experience.
While their ontologies are worlds apart, I think there is an argument in support of the
view that Johnson did not see the extent to which his aesthetic theory vindicates
certain insights of Kantian aesthetics regarding the connection between value and
meaning. By the time of his third Critique, Kant had come to understand that aesthetic
experience was important for explaining how normativity is possible in a sensuous
world. With an updated worldview, this is not such a far cry from Johnson’s
objective: to reunite minds and bodies in the concepts we use to understand
experience.

Johnson has laid out the foundations for a theory of meaning which has the potential
to unite the purposes and preoccupations of certain strands from both analytic and
continental philosophy: for example, American Pragmatism, second wave cognitive
science and systems theory (or normative pragmatics). This is not to suggest that
Johnson retreats from commitment to any one position: quite the contrary. Well entrenched approaches to a number of philosophical problems are upended and in doing so Johnson provides arguments for particular sides to current debates such as for the contextualists as opposed to the minimalists in the philosophy of language; and unwittingly for formalism in aesthetics, albeit an embodied formalism. This book should be of interest to all philosophers as it attempts to reconnect analytic philosophy with lived experience.

Philosophy

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